

Appl. No. 10/815,717
Amdmt. Dated July 25, 2006
Reply to Office Action of May 25, 2006

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REMARKS/ARGUMENTS

The undersigned conducted an interview with the Examiner on June 27, 2006. A discussion was had of the fact that in Karr, the point-to-point and broadcast mode communications are both accomplished using an unused portion of an FM spectrum. The Examiner expressed the opinion that the unused portion of an FM spectrum could be the same as a "cellular spectral resource" as claimed in claim 1. Upon a review of various publicly available documents, Applicant could not find support for the implementation of cellular systems using the FM band as suggested by the Examiner. The Examiner suggested that referring to cellular signals more specifically would help in distinguishing over the FM signals of Karr. Notwithstanding lack of support for the Examiner's previous position, in the interest of moving prosecution along, claim 1 has been amended to refer to the fact that the PMP communications are achieved using "cellular communications signals", and that the P2P communications are also achieved using signals in form similar to the cellular communications signals. Furthermore, the claim has been narrowed to refer to CDMA or OFDM signals specifically. Finally, the claim also recites that the mobile station communicates directly with a cellular base station for PMP communications.

It is respectfully submitted that the Karr reference does not suggest using a cellular resource for either broadcast OR peer-to-peer communications.

Breaking down the text in the summary of the invention, beginning on page 1, right hand column:

"A mobile device, such as a specially configured watch, receives the transmission in either the broadcast mode or localcast mode."

Here Karr is referring to a device, such as a watch, that operates in localcast/broadcast mode, with the only example given being FM.

"In alternate embodiments, the mobile device may be operated as a stand-alone paging or

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messaging subscriber unit, or built into a mobile telephony device such as a cellular telephone", emphasis added.

Here, the reference is referring to supplementing normal cellular telephone functionality with the additional device that receives localcast/broadcast communications. That this is the correct interpretation is further supported by claim 24 which reads "The mobile device in claim 20, wherein the mobile device is further configured to operate within a cellular telephone". In other words, the mobile device is a separate component that can be installed into a cellular telephone.

"Advantageously, the mobile device is not limited to the use of either a wide area transmission system (such as a cellular network) or a local area transmission system (such as an infrared communication link), but, rather, reaps the benefits of both."

This passage refers to the benefits of the device – namely that it "reaps the benefit" of both wide area transmission and local area transmission. However, the paragraph does not use a cellular communication spectrum for either the broadcast or localcast communications. Rather, the passage read in context suggests using unused FM band for localcast and broadcast reaps the benefits of both wide area and local area transmission.

In fact, referring to the background of the invention (see paragraph 2) the reference specifically refers to the disadvantages of cellular data-transmit telephony based solutions being "far from power-efficient, and impose (relative) cost and size burdens that make them unusable", emphasis added.

Karr is looking for a low cost device to integrate into a wristwatch. The mobile device is configured to receive localcast data transmitted by a localcast transmitter, over a locally-unused portion of the FM band. In this way, the mobile device makes use of the same radio electronics to communicate in both broadcast and localcast modes, thereby reducing size and power consumption. Having developed such a device, they suggest that it might also be included in a cellular phone, but the functionality is not integrated with that of the cellular telephone.

Up to this point, there has been no discussion of peer-to-peer – rather only localcast and

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broadcast.

Paragraph 6 introduces the peer-to-peer aspect. "In another aspect, the mobile device is configured to communicate in a peer-to-peer fashion by transmitting and receiving information from other mobile devices over a localcast communication link. The mobile device transmits and receives information in a locally unused FM band. In this way, information may be shared between two or mobile devices in a manner similar to that of mobile devices and laptops or personal computers communicating over IRDA infrared, without a need for additional communication components or circuitry."

Again, there is simply no suggestion of using a cellular resource for the peer-to-peer communications.

Furthermore, Karr does not discuss the use of CDMA or OFDM signals to achieve PMP and P2P communications. On this basis, the Examiner is respectfully requested to withdraw the 35 U.S.C 102(e) rejection of claims 1, 25 and 30.

As to claim 2, this was also discussed during the interview with the Examiner. There is no discussion in Karr of the use of a downlink PMP band and an uplink PMP band in the manner claimed. In particular, the device claimed in claim 2 uses the downlink and uplink PMP bands respectively for receiving and transmitting in PMP mode, but uses only the PMP uplink band for both transmitting and receiving while in wireless P2P mode. There is no suggestion of anything of this sort whatsoever in Karr. Similarly, all of the other claims that refer to uplink and downlink PMP bands recite features not taught in Karr.

In paragraph 6 of the detailed action, the Examiner has rejected claims 18, 21 to 23 and 29 as being unpatentable over Karr in view of Stanforth (US Patent No. 6,961,575). Claims 19 and 29 have been cancelled. Stanforth provides for an ad hoc mobile radio access system interfaced to the PSTN and cellular networks. Importantly, the ad hoc mobile access system is not part of the cellular network. This is made clear in the title itself, the Abstract and repeatedly throughout the specification. Rather, an ad hoc structure is connected through a "gateway" that interfaces the ad-hoc system to a cellular network system. The gateway is not part of a

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conventional cellular system. See the Abstract; column 4, line 67 to column 5, line 10; column 5, lines 20 to 25; column 6, line 65; column 7, line 21; column 9, line 12; column 11, lines 15 to 20.

On the basis of this the Examiner is respectfully requested to withdraw the 35 U.S.C. 103(a) rejections of the claims.

In view of the foregoing, early favorable consideration of this application is earnestly solicited.

Respectfully submitted,

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